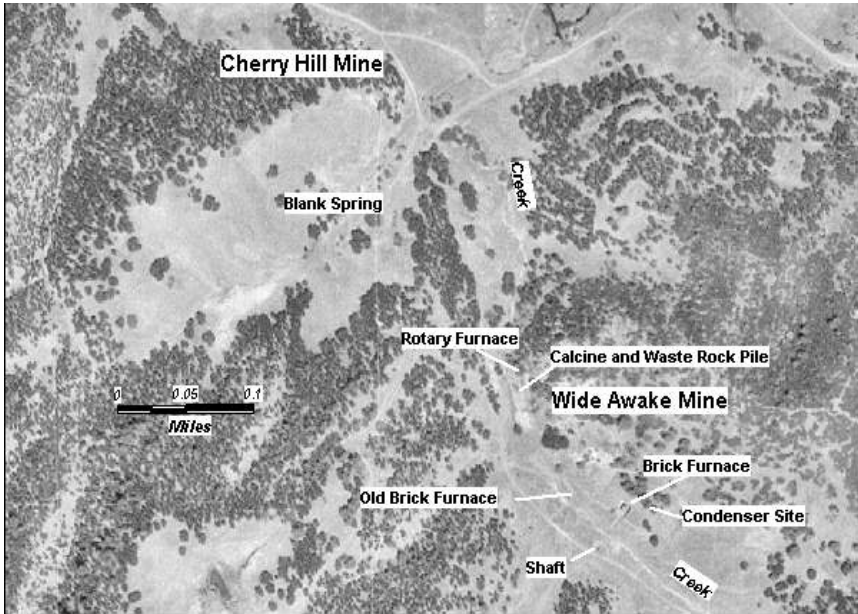
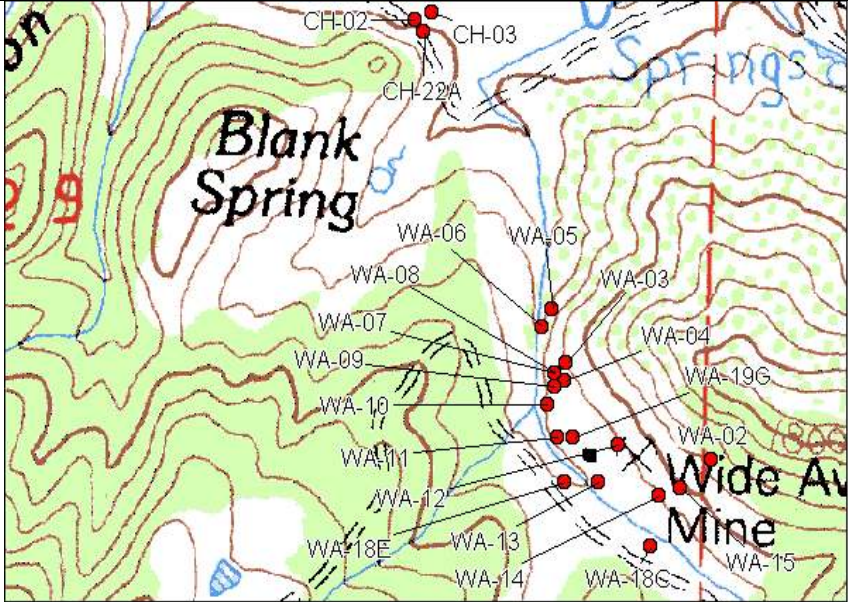


## Mine Cleanup and Abatement Order

<b>Responsible Party</b>	Homestake Mining Company (Homestake). Period of Mining Lease with Option to Purchase, June 29, 1978 to May 10, 1993.
<b>Parcel Controlled:</b>	The "Wide Awake Quick Silver Lode Mining Claim" represented by Lots 43 and 44 in Sections 28 and 29, Township 14 North, Range 5 West, M. D. B & M. See Mining Lease with Option to Purchase between Emma G. Trebilcot and Homestake Mining Company, dated June 29, 1978. In addition to Lots 43 and 44 in Sections 28 and 29, the referenced lease included numerous other fee simple lands described in Exhibit A of the lease.
<b>Map:</b>	 An aerial photograph of a mining area with various features labeled. At the top is 'Cherry Hill Mine'. Below it is 'Blank Spring'. To the right of 'Blank Spring' is a 'Creek'. Further down and to the right are 'Rotary Furnace', 'Calcine and Waste Rock Pile', 'Wide Awake Mine', 'Brick Furnace', 'Old Brick Furnace', 'Shaft', 'Condenser Site', and another 'Creek'. A scale bar in the lower-left quadrant of the map shows distances of 0, 0.05, and 0.1 miles.

	 <p>Map source: CALFED Task 5C1 Appendices, September 2003.</p>
<b>Waste Located on the Site:</b>	<p>Contaminated media at Wide Awake Mine includes:</p> <ul style="list-style-type: none"> <li>• 8,000 cubic yards of waste rock.</li> <li>• 20,000 cubic yards of processed mill tailings.</li> <li>• An estimated 400 kg of mercury remains at the Wide Awake Mine, almost entirely within the tailings and waste pile.</li> <li>• Furnaces and retorts are present. Significant processing took place on-site.</li> <li>• Ore from the Central, Empire, and possibly Manzanita Mine was milled at the Wide Awake Mine site.</li> <li>• Soil samples collected at 15 locations. Mercury concentrations of less than 10 to 1,040 ppm in soil and waste materials near furnaces.</li> <li>• Mercury concentrations detected in mine waste at Wide Awake Mine exceed both human health and ecological Preliminary Mitigation Goals.</li> </ul>
<b>Discharge:</b>	<p>5C2 Report found that, "Past mining activities has likely increased mercury mobility from the Wide Awake Mine by placing mercury-bearing materials in piles subject to erosion.</p> <ul style="list-style-type: none"> <li>• Mercury is mobilized by storm water runoff, slope failure, or water rock interaction from mine wastes at Wide Awake Mine and enters the unnamed intermittent tributary to Sulphur Creek.</li> <li>• Approximately 8 ton/yr of sediment is estimated to erode from the mine waste located immediately adjacent to and within the tributary to Sulphur Creek.</li> </ul>
<b>Ability to Control:</b>	<p>The June 29, 1978 Mining Lease with Option to Purchase between Emma G. Trebilcot and Homestake Mining Company included:</p> <ol style="list-style-type: none"> <li>1. Mining Property. (a) Owner leases to Homestake...together with all</li> </ol>

	<p>appurtenances and water and mining rights incident thereto ("Mining Property"), ....</p> <p>3. Exclusive Possession. During the lease term Homestake shall have exclusive possession for mining purposes of all of the Mining Property, reserving to Owner the use of the surface for livestock grazing and other agricultural uses and water development incidental to such use so long as such uses do not unreasonably interfere with the mining uses of Homestake.</p> <p>Homestake held the lease from June 29 1978 until May 10 1993. During that period, Homestake had exclusive possession of the mining property for mining purposes and therefore had the ability to prevent mine materials and enriched mercury soil from entering waterways. Specific activities could have included:</p> <ul style="list-style-type: none"> <li>• Relocating material piles away from waterways.</li> <li>• Placing barriers, such as grass covered berms, between mine materials and waterways.</li> <li>• Recontouring and revegetation of material piles and areas of surface disturbance by mining activity to reduce erosion.</li> <li>• Redirection of storm runoff around material piles and areas of surface disturbance to reduce erosion.</li> <li>• Stabilization of stream banks containing enriched mercury alluvium to minimize erosion during storm events.</li> </ul>
<p><b>Legal Theory Holding Responsible Party Accountable</b></p>	<p>Homestake is subject to the Order because Homestake held a mining lease interest in the property during the time when the waste piles were discharging mercury and other pollutants to surface waters, which caused exceedances of water quality objectives. Evidence that Homestake held a leasehold interest in the property can be found in the documents referenced below, which are in the files of the Central Valley Water Board. The waste piles are still present on the property.</p> <p>California Water Code (CWC) section 13304 authorizes the Regional Water Boards to issue cleanup and abatement orders to any person who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance</p> <p>Homestake, by leasing portions of the property where mining waste piles were present, took responsibility for appropriately managing the discharges from these waste piles to the extent that their lease gave them the ability to do so. As these waste piles were eroding into surface waters during the time of Homestake's leasehold interest, Homestake qualifies a person who has, "caused or permitted waste to be discharged into waters of the state."</p> <p>Studies conducted during the development of a TMDL for the Cache Creek Watershed, including the CalFed 5C2 Report, determined that the erosion of materials from the waste piles present on the parcels that Homestake controlled contributed to a condition of pollution, defined under CWC</p>

	<p>section 13050 as an alteration of the quality of waters of the state to a degree which unreasonably affects the waters for beneficial uses.</p> <p>The State Water Resources Control Board (State Board) has determined that, in addition to the initial release of pollutants into the environment, the passive release of pollutants is considered a “discharge” of waste for the purposes of determining liability under CWC section 13304. (State Board Order No. WQ 86-2, In the Matter of the Petition of Zoecon Corporation; State Board Order No. WQ 92-13, In the Matter of the Petitions of Wenwest, Inc., et al.) Although Homestake did not necessarily create the waste piles that are still eroding into surface waters, the scope of Homestake’s lease indicates that it had some degree of ability to control the discharge of wastes.</p> <p>The State Board has ruled that liability for a cleanup ordered under section 13304 is joint and several. (State Board Order No. WQ 90-2, Petition of Union Oil Company.) However, the State Board has declined to apportion liability among responsible parties, leaving that determination to the parties themselves. It is the responsibility of Homestake to determine their responsibility relative to the other named dischargers, and to cooperatively address the tasks required of the responsible parties in the Order.</p> <p>The site’s unique geophysical characteristics made it attractive to Homestake’s natural resource exploration – but exploration on this property carries potential liabilities as well as potential rewards. Homestake should not be allowed to disclaim their responsibility for managing the wastes during the time of their ownership once their exploration proved fruitless.</p>
<b>Evidence in the Regional Water Board File</b>	<ol style="list-style-type: none"> <li>1. Colusa County document 2198. Mining Lease with Option to Purchase between Emma G. Trebilcot and Homestake Mining Company, dated June 29, 1978 for the Wide Awake Quick Silver Lode Mining Claim represented by Lots 43 and 44 in Sections 28 and 29, Township 14 North, Range 5 West, M. D. B &amp; M (APN# 018-200-010-000).</li> <li>2. Colusa County document 2278. Surrender of Mining Lease with Option to Purchase between Emma G. Trebilcot and Homestake Mining Company, dated 10 May 1993.</li> </ol>
<b>Photographic evidence pertaining to this parcel (if available)</b>	



Photo1. Wide Awake Mine Brick Furnace above the unnamed intermittent tributary to Sulphur Creek. A Hydroxylamine HCl leaching procedure performed on soil below the condenser site and brick fragments and soil at the base of the furnace mobilized 6 and 21 percent of the total mercury within the respective samples. These values represented the highest mercury mobility of all the leaching analyses in the District during the CALFED study (CVWB Photo, 2002).



Photo 2. Processed tailings are typically red in color because of oxidized iron. Tailings are the solid waste material that remains after mercury ore is



processed in a furnace or retort. Mercury is being released from this Wide Awake Mine waste pile to Sulphur Creek by erosion from this waste pile into a small creek which is tributary to Sulphur Creek (CVWB Photo, 2002).



Photo 3. Approximately 8 ton/yr of sediment is estimated to erode from Wide Awake mine waste piles located immediately adjacent to and within a tributary to Sulphur Creek (CVWB Photo, June 2009).